

- Spiral **membrane** module back **washing** method for separation apparatus e.g. precision filtration apparatus - involves supplying back wash gas and raw water in opposing directions via module until residual water permeation is zero.

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NOVELTY - Raw water and back wash gas are supplied in opposing direction via a membrane module (40). The gas supply is continued until the residual water permeation reduces and only gas is received on the downstream end.

DETAILED DESCRIPTION - A permeable water flow path agent (15) is distributed into a bag like film (10). Raw water is admitted into the spiral membrane module (40) formed by winding the bag-like film, around a shaft (20). A back washing gas is supplied in the opposite direction to promote reverse **flow of water**. The **gas** supply continues until the residual water permeation reduces and gas **flow** takes place through **gas liquid mixture**.

USE - Used in precision filtration apparatus, ultrafiltration equipment and reverse osmosis membrane separation apparatus.

ADVANTAGE - Elimination of catchment pipe. Reduces propagation of permeated water. Aids efficient back **wash** even for

**membrane** module with large film surface. DESCRIPTION OF DRAWING(S)

- The drawing shows the schematic apparatus when carrying out back wash. Dwg.5/6